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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,222	09/25/2006	Theophil Markus Lutz	930024-2031	6514
7590 11/01/2007 Frommer Lawrence & Haug			EXAMINER	
745 Fifth Avenue New York, NY 10151			GREEN, ANTHONY J	
			ART UNIT	PAPER NUMBER
			1793	
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			11/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No. Applicant(s)					
Office Action Summan	10/552,222	LUTZ ET AL.				
Office Action Summary	Examiner	Art Unit				
	Anthony J. Green	1793				
The MAILING DATE of this communication appeariod for Reply	ears on the cover sheet wi	h the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNIC 6(a). In no event, however, may a re ill apply and will expire SIX (6) MON cause the application to become AB	ATION. ply be timely filed  THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	- action is non-final.		•			
3) Since this application is in condition for allowan		ers, prosecution as to the merits is				
closed in accordance with the practice under E	•	· ·				
Disposition of Claims						
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.	1) Claim(s) 1-13 is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-13</u> is/are rejected.						
7) Claim(s) is/are objected to.	) ☐ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers		•				
9)⊠ The specification is objected to by the Examiner		•				
10) The drawing(s) filed on is/are: a) acce	i i	by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction	on is required if the drawing(	s) is objected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Exa	aminer. Note the attached	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. §	119(a)-(d) or (f).				
a)⊠ All b)⊡ Some * c)⊡ None of:			•			
<ol> <li>Certified copies of the priority documents</li> </ol>	have been received.					
2. Certified copies of the priority documents	have been received in A	pplication No				
<ol> <li>Copies of the certified copies of the prior</li> </ol>	ity documents have been	received in this National Stage				
application from the International Bureau	. , ,,					
* See the attached detailed Office action for a list of	of the certified copies not	received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview S	ummary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s	/Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/06/05	5) Notice of In 6) Other:	formal Patent Application				
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#### **DETAILED ACTION**

### Response to Preliminary Amendment

1. The preliminary amendment has been entered. Claims 1-13 are currently pending.

## Specification

- 2. The substitute specification has been entered.
- 3. The disclosure is objected to because of the following informalities:

The phrase "No figure for the abstract" should be deleted from the abstract.

Applicant needs to remove the reference to the claims from the specification. Appropriate correction is required.

## Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 1-13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 provides for the use of lithium glycerophosphate, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it

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merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 2 is vague and indefinite as it does not appear to recite any active positive method steps. The phrase "the presence of alkalis" lacks proper antecedent basis. It is unclear as to what is meant by the phrase "brought onto the structure or into the structure".

Claim 3 is inconsistent with claim 2 as claim 2 is not drawn to the same treatment method. The claim lacks an active positive method step.

In claim 5 it is unclear as to what the term "it" refers to.

Claim 8 is inconsistent with claim 2 as claim 2 is not drawn to the same treatment method. The phrase "the open air" lacks proper antecedent basis.

Claim 10 is inconsistent with claim 2 as claim 2 is not drawn to the same treatment method. The claim lacks an active positive method step. The phrase "the not-yet solidified paste" lacks proper antecedent basis.

### Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35

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U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products*, *Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

## Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marazzani et al (US Patent No. 6,402,990 B1 and 6,712,995 B2) in view of Lane et al (US Patent Application Publication No. 2005/0258401 A1).

The Marazzani et al references teach methods and compositions for inhibiting corrosion of steel reinforcements in concrete structures using a composition which comprises a solution and/or an emulsion and/or a micro-emulsion of a) one or more amino- and/or hydroxyalkylamino compound(s), partially or completely neutralized with one or more acid(s) selected from the group consisting of carbonic acid, phosphoric acid, diphosphoric acid, monofluorophosphoric acid, and partial salts thereof, glycerophosphoric acid, glucosemonocarboxylic acid,  $R_{12}$ -COOH wherein  $R_{12}$  is a linear or branched  $C_6$  to  $C_8$  alkyl group,

wherein R<sub>13</sub> is H or a linear or branched C<sub>1</sub> to C<sub>4</sub> alkyl, --OR or --NO<sub>2</sub> group, HOOC--R<sub>14</sub> --COOH wherein R<sub>14</sub> is a C<sub>6</sub> to C<sub>8</sub> alkylene group, and mixtures

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thereof, whereby said carboxylic acid(s) may additionally contain one or more hydroxyl groups, in an amount sufficient to inhibit corrosion of said steel reinforcement, and b) one or more surfactant(s) providing an enhanced wetting and penetration capability by altering the surface tension, and c) one or more water-based or water-thinnable water repellent agent(s) selected from organosilanes and/or organosiloxanes.

Lane et al teaches that it is known in the art to use di-sodium- beta glycerophosphate as corrosion inhibitors in cement compositions having metallic reinforcements present.

The instant claims are obvious over the combination of references. While the primary references do not specifically recite the use of lithium glycerophosphate as the corrosion inhibitor they do teach the use of glycerophosphoric acid and accordingly it would have been obvious to one of ordinary skill in the art to use alkali metal salts of glycerophosphoric acid as corrosion inhibitors in cement compositions containing rebars as the secondary reference teaches that di-sodium- beta glycerophosphate is known in the art as a corrosion inhibitor for cement compositions containing reinforcements. That is, one of ordinary skill in the art would have found it obvious to expect that a lithium glycerophosphate would also possess corrosion inhibition properties and therefore it would have been obvious to substitute this salt for the glycerophosphoric acid of the reference in the absence of evidence to the contrary. The claims would have been obvious because a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and that there would have been a reasonable expectation of success and because "a person of ordinary skill has good"

reason to pursue the known options with his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense." Accordingly the claims would have been obvious because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention. As for the amount of the lithium glycerophosphate utilized one would have found it obvious to utilize amounts effective to prevent corrosion.

10. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lane et al (US Patent No. 2005/0258401 A1).

Lane et al teaches that it is known in the art to use di-sodium- beta glycerophosphate as corrosion inhibitors in cement compositions having metallic reinforcements present.

The instant claims are obvious over the reference. While the reference does not specifically recite the use of lithium glycerophosphate as the corrosion inhibitor it does teach the use of di-sodium beta glycerophosphate as a corrosion inhibitor and accordingly one of ordinary skill in the art would have found it obvious to try other alkali metal glycerophosphates without producing any unexpected results absent evidence showing otherwise. The claims would have been obvious because "a person of ordinary skill has good reason to pursue the known options with his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense." Accordingly the claims would have been

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obvious because the substitution of one known element for another would have yielded predictable results to one of ordinary skill in the art at the time of the invention. As for the amount of the lithium glycerophosphate utilized one would have found it obvious to utilize amounts effective to prevent corrosion.

#### Information Disclosure Statement

11. References AL, AM, AN, AQ and AR have not been considered as they are not in compliance with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony J. Green whose telephone number is 571-272-1367. The examiner can normally be reached on Monday-Thursday 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000

Primary Examiner

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October 25, 2007